

A NEW SPECIES OF *LONEURA* (PSOCOPTERA: PTILONEURIDAE) FROM CHIAPAS, MEXICO

ALFONSO NERI GARCIA ALDRETE

Instituto de Biología, UNAM., Departamento de Zoología, Apartado Postal 70-153,
04510 México, D.F., MEXICO
(E-mail: anga@servidor.unam.mx)

Abstract.—*Loneura ocotensis* n.sp., is described and illustrated on basis of one male collected at the Biosphere Reserve "El Ocote", in western Chiapas. It is the ninth species known in the genus, and the third one to be recorded in México.

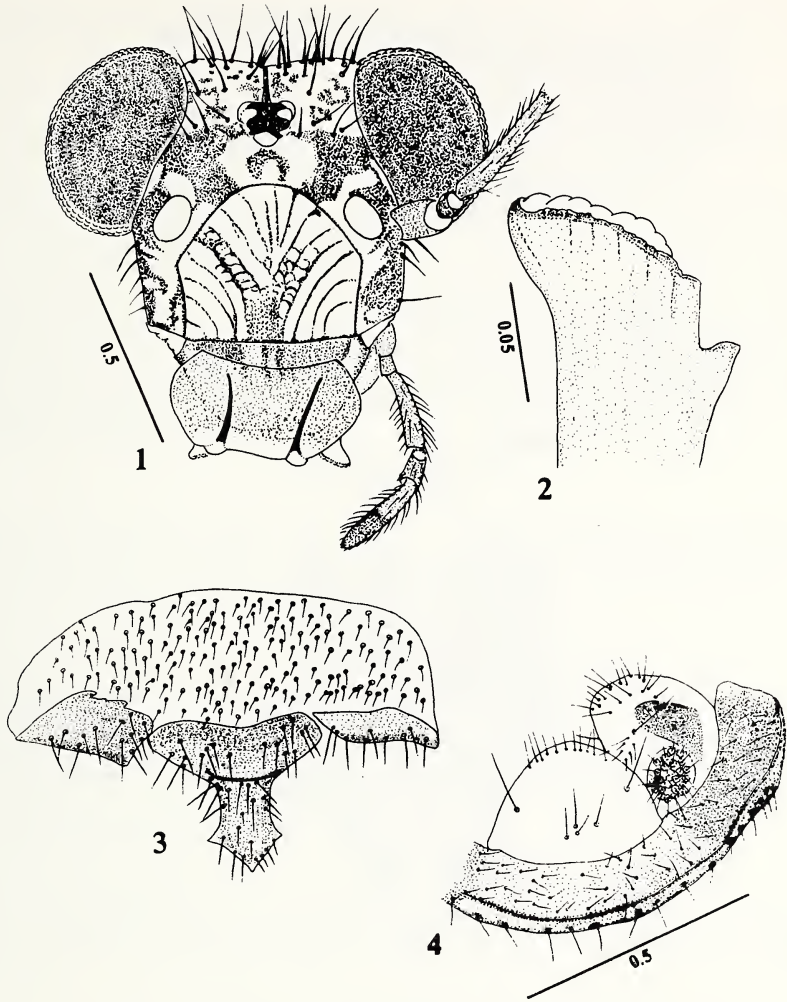
Resumen.—*Loneura ocotensis* n.sp., es descrita e ilustrada, en base a un ejemplar macho recolectado en la Reserva de la Biósfera "El Ocote", en el extremo occidental de Chiapas. Es la novena especie que se conoce en el género y la tercera que se registra en México.

The eight species known in the genus *Loneura* (*L. amazonica* New, *L. boliviana* Williner, *L. brasiliensis* Roesler, *L. crenata* Navas, *L. erwini* New and Thornton, *L. leonilae* García Aldrete, *L. quinarya* Navas, and *L. splendida* Mockford), extend from Southern Mexico to Brazil. Besides these two countries, they have been recorded in Guatemala, Belize, Costa Rica, Bolivia and Perú, and Mockford (1993) indicates that an undescribed *Loneura* occurs in Arizona. Assignment of species to this genus is still based on wing venation characters (García Aldrete, 1995). The purpose of this paper is to describe a new *Loneura* from the Mexican state of Chiapas. The other species known in the country are *L. leonilae* García Aldrete, from Yucatán and Campeche, and *L. splendida* Mockford from Chiapas, Puebla and Veracruz.

The head, right legs and wings, and genital parts, were mounted in Euparal. Measurements of parts mounted were taken with a filar micrometer whose measuring unit is 1.36 microns for wings, legs and flagellomeres, and 0.53 microns for other parts. Parts measured, or counted, are abbreviated as follows: FW = fore wing; HW = hind wing; F = femur; T = tibia; t_1, t_2, t_3 , = tarsomeres of right hind leg; P_4 = fourth segment of right palpus; $f_1 \dots f_n$ = flagellomeres of right antenna; IO = minimum distance between compound eyes; D = antero-posterior diameter of right compound eye; d = transverse diameter of right compound eye; PO = d/D (IO, D and d measured in front view of the mounted head on the slide). The type of the species here described is deposited in the National Insect Collection, Instituto de Biología, UNAM (IBUNAM), México City.

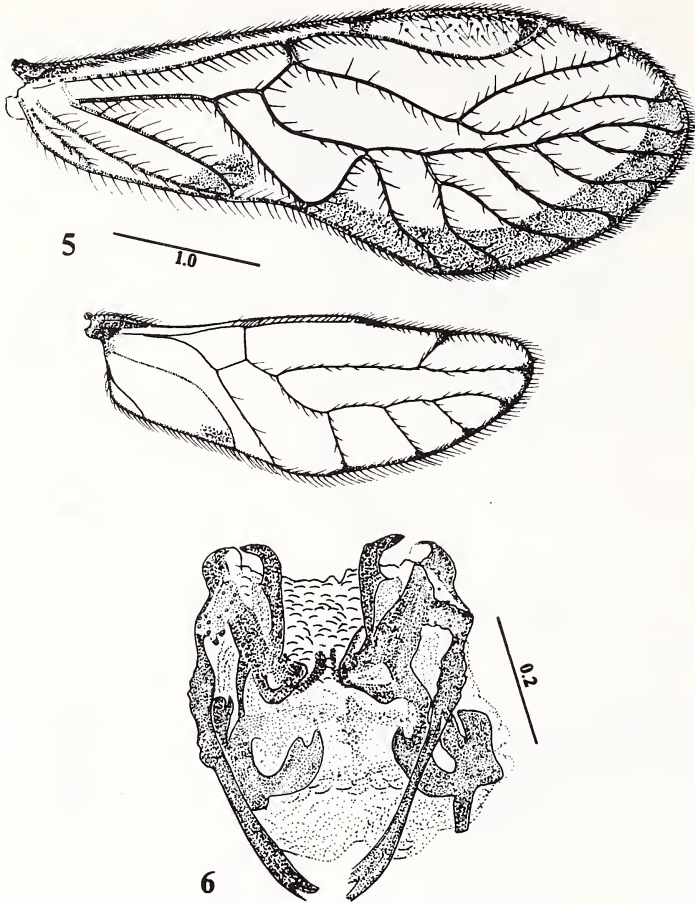
Loneura ocotensis, n. sp. (Male)

Color (in 80% alcohol): Ground color creamy white, with dark brown areas, as indicated below. Head pattern (Fig. 1). Antennae: scape and pedicel brown; flagellomeres pale brown, with apices white. Maxillary palps brown, Mx4 with distal half slightly more pigmented. Fore and hind coxae creamy white, with apices brown; middle coxae brown; trochanters, femora, tibiae and t_1 pale brown, t_2 - t_3 dark brown.



Figs. 1-4. *Loneura ocotensis* n. sp. Male. 1. Front view of head. 2. Apex of right lacinia. 3. Hypandrium. 4. Clunium, epiproct and left paraproct. Scales in mm. Figure 3 to scale of Figure 4.

Hind femora each with a distal brown spot, hind tibiae distally dark brown. Prothorax creamy white, with two dark spots on each side. Tergal lobes, scutellae and pleurae of meso and metathorax dark brown, with episterna more pigmented than epimera. Wings mostly hyaline, veins brown. Hind wings with dark spots at distal ends of veins (Fig. 5). Fore wings with a brown band along margin, as illustrated (Fig. 5), and a large spot at the distal ends of Cu_2 -IA. Pterostigma with a brown spot on each end. Abdomen creamy white, with dark brown subcuticular rings, more conspicuous dorsally. Clunium dark brown at both ends, light brown dorsally, in area next epi-



Figs. 5-6. *Loneura ocotensis* n. sp. Male. 5. Fore and hind wings. 6. Phallosome. Scales in mm.

proct; epiproct unpigmented, paraprocts also unpigmented, except for an elongate, light brown area next sensory fields.

Morphology: Lacinial tips (Fig. 2). Areola postica high, almost reaching M, connected to it by a short crossvein; M with five branches, the anterior-most bifurcated. Hind wings with M four branched (Fig. 5). Hypandrium (Fig. 3) consisting of a central piece, flanked by two smaller pieces, setose as illustrated; central piece with a posterior projection, arrowhead-shaped (Fig. 3). Phallosome (Fig. 6) complex, posteriorly with two distinct, short, stout, distally acuminate phallic sclerites. Paraprocts (Fig. 4) broad, posteriorly rounded; sensory fields with 26-28 trichobothria set on small basal rosettes. Epiproct (Fig. 4) broad, posteriorly rounded, with a large seta on each side, a row of setae along posterior margin and a group of four setae in the middle.

Measurements: FW: 4488; HW: 3026; F: 1150; T: 1904; t_1 : 790; t_2 : 108; t_3 : 141; P_4 : 216; f_1 : 870; f_2 : 773; f_3 : 616; f_4 : 549; f_5 : 382; f_6 : 374; f_7 : 310; f_8 : 277; f_9 : 254; f_{10} : 217; f_{11} : 231; IO: 432; D: 494; d: 310; IO/D: 0.87; PO: 0.62.

Type Material: MEXICO, Chiapas, Biosphere Reserve "El Ocote", 50 km NW Ocozacoautla, 790m, I.V. 1993, attracted to UV trap, A.N. García Aldrete & E. Barrera, holotype male (IBUNAM).

Comments: The specimen on which this species is based is aberrant in front wing venation: the right fore wing has a tall areola postica connected to the M stem by a short crossvein, but in the left fore wing the areola postica is free, Mockford (in litt.) has observed the same anomaly in other specimens of this species. The species is placed in *Loneura* on basis of male genital characters and wing venation; with *L. orenata* Navas (New, 1976), and *L. leonilae* García Aldrete (1995) constitute a complex of closely related species that have in common the forewing pattern, the M next to the areola postica forked, the same hypandrium plan and similar phallosomes with two stout, acuminate, anterior sclerites.

ACKNOWLEDGMENTS

I thank E. L. Mockford (Illinois State University; Normal, Illinois) for his comments on a former version of this manuscript, in which the species here described had been treated, erroneously, as a species of *Ptiloneuropsis*.

LITERATURE CITED

- García Aldrete, A. N. 1995. A new species of *Loneura* (Psocoptera: Ptiloneuridae) from Yucatán, México. *Folia Entomol. Mex.* 93:25–30.
- Mockford, E. L. 1993. *North American Psocoptera (Insecta)*. Flora and Fauna Handbook No. 10. Sandhill Crane Press, Inc. Gainesville, Fla., Leiden, The Netherlands, 455 pp.
- New, T. R. 1976. Redescriptions of some Psocoptera from Costa Rica described by L. Navás. *Rev. Bras. Ent.* 20(2):91–99.

Received 14 December 1995; accepted 5 August 1997.